

## CLAIMS

- 1        1.        A printing system, comprising:  
2                a laser configured to produce a printing beam for printing a code on a  
3        product, the laser being at most a 25 Watt laser;  
4                a housing including a printing beam exit member through which the  
5        printing beam exits the housing; and  
6                an optics assembly within the housing, the optics assembly focussing  
7        the printing beam on a product which is adjacent to the housing.
- 1        2.        The printing system of claim 1, wherein the printing beam exit  
2        member is movable relative to the housing;
- 1        3.        The printing system of claim 1, wherein a bearing couples the printing  
2        beam exit member to the housing.
- 1        4.        The printing system of claim 3, wherein the bearing has an axis of  
2        rotation and the printing beam passes through the bearing along the axis of  
3        rotation.
- 1        5.        The printing system of claim 1, further comprising:  
2                a negative lens for expanding the printing beam and a positive lens for  
3        focussing the printing beam.
- 1        6.        The printing system of claim 1, further comprising:  
2                a collimating lens positioned between the negative lens and the  
3        positive lens.

- 1           7.     The printing system of claim 1, further comprising:  
2                 electronics for correcting the non-linearity of one or more lenses  
3                 through which the printing beam passes.
- 1           8.     The printing system of claim 1, further comprising:  
2                 a print zone light source for producing a print zone beam for defining a  
3                 print zone within which the code is printed, the print zone beam exiting the  
4                 housing through the printing beam exit member.
- 1           9.     The printing system of claim 1, further comprising:  
2                 one or more mirrors for reflecting the printing beam in a desired  
3                 direction.
- 1           10.    The printing system of claim 9, wherein at least one of the one or more  
2                 mirrors are connected to a motor configured to move the mirrors so as to  
3                 control the direction that the printing beam is reflected.
- 1           11.    The printing system of claim 10, further comprising:  
2                 electronics for controlling the motors so as to steer the printing beam  
3                 from one location to another.
- 1           12.    The printing system of claim 1, wherein the laser is an air cooled laser.
- 1           13.    The printing system of claim 1, wherein the laser is at most a 20 Watt  
2                 laser.

1        14.    The printing system of claim 1, wherein the laser is at most a 15 Watt  
2        laser.

1        15.    The printing system of claim 1, wherein the printing system weighs  
2        less than 25 pounds.

1        16.    The printing system of claim 1, wherein the printing system weighs  
2        less than 22 pounds.

1        17.    The printing system of claim 1, wherein the printing system includes a  
2        housing having a volume of less than 1200 cubic inches.

1        18.    The printing system of claim 1, wherein the printing system includes a  
2        housing having a volume of less than 600 cubic inches.